

**DECLARATION FOR PATENT APPLICATION  
AND POWER OF ATTORNEY**

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below adjacent to my name.

I believe I am an original, first and joint inventor of subject matter (process, machine, manufacture, or composition of matter, or an improvement thereof) which is claimed and for which a patent is sought by way of the application entitled

**Superconducting Single Photon Detector**

which (check)  is attached hereto.

and is amended by the Preliminary Amendment attached hereto.  
 was filed on \_\_\_\_\_ as Application Serial No.  
 and was amended on \_\_\_ (if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information, which is material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, § 119(a)-(d) of any foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating at least one country other than the United States of America listed below and have also identified below any foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating at least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application(s) of which priority is claimed:

Prior Foreign Application(s)			Priority Claimed	
Number	Country	Day/Month/Year Filed	Yes	No
N/A			<input type="checkbox"/>	<input type="checkbox"/>

I hereby claim the benefit under Title 35, United States Code, § 119(e) of any United States provisional application(s) listed below:

Provisional Application Number	Filing Date
N/A	

I hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s) or PCT international application(s) designating the United States of America listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior application(s) in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose information, which is material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56, which became available between the filing date of the prior application(s) and the national or PCT international filing date of this application:

Application Serial No.	Filing Date	Status (patented, pending, abandoned)
N A		

I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and to transact all business in the United States Patent and Trademark Office connected therewith:

Alan H. MacPherson (24,423); Brian D. Ogonowsky (31,988); David W. Heid (25,875); Norman R. Klivans (33,003); Edward C. Kwok (33,938); David E. Steuber (25,557); Michael Shenker (34,250); Stephen A. Terrile (32,946); Peter H. Kang (40,350); Ronald J. Meetin (29,089); Ken John Koestner (33,004); Omkar K. Suryadevara (36,320); David T. Millers (37,396); Michael P. Adams (34,763); Robert B. Morrill (43,817); James E. Parsons (34,691); Philip W. Woo (39,880); Emily Haliday (38,903); Tom Hunter (38,498); Michael J. Halbert (40,633); Gary J. Edwards (41,008); Daniel P. Stewart (41,332); John T. Winburn (26,822); Tom Chen (42,406); Fabio E. Marino (43,339); Don C. Lawrence (31,975); Marc R. Ascolese (42,268); Carmen C. Cook (42,433); David G. Dolezal (41,711); Roberta P. Saxon (43,087); Mary Jo Bertani (42,321); Dale R. Cook (42,434); Sam G. Campbell (42,381); Matthew J. Brigham (44,047); Hugh H. Matsubayashi (43,779); Patrick D. Benedicto (40,909); T.J. Singh (39,535); Shireen Irani Bacon (40,494); Rory G. Bens (44,028); George Wolken, Jr. (30,441); John A. Odozynski (28,769); Cameron K. Kerrigan (44,826); Paul E. Lewkowicz (44,870); Theodore P. Lopez (44,881); Mayankumar M. Dixit (44,064); Eric Stephenson (38,321); Christopher Allenby (45,906); David C. Hsia (46,235); Mark J. Rozman (42,117); Margaret M. Kelton (44,182); Do Te Kim (46,231); Alex Chen (45,591); Monique M. Heyninck (44,763); Gregory J. Michelson (44,940); Jonathan Geld (44,702); Emmanuel Rivera (45,760); Jason FarHadian (42,523); Matthew J. Spark (43,453); and Elaine H. Lo (41,158).

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I declare that all statements made herein of my own knowledge are true, all statements made herein on information and belief are believed to be true, and all statements made herein are made with the knowledge that whoever, in any matter within the jurisdiction of the Patent and Trademark Office, knowingly and willfully falsifies, conceals, or covers up by any trick, scheme, or device a material fact, or makes any false, fictitious or fraudulent statements or representations, or makes or uses any false writing or document knowing the same to contain any false, fictitious or fraudulent statement or entry, shall be subject to the penalties including fine or imprisonment or both as set forth under 18 U.S.C. 1001, and that violations of this paragraph may jeopardize the validity of the application or this document, or the validity or enforceability of any patent, trademark registration, or certificate resulting therefrom.

Full name of first joint inventor:	Roman Sobolewski
Inventor's Signature:	Date:
Residence:	Pittsford, New York 14534
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Citizenship: POLAND	

Full name of second joint inventor:	Grigory N. Geltzman
Inventor's Signature:	Date:
Residence:	Moscow, Russia
Post Office Address:	74 Altufevskoe Ch., Apt. 501 Moscow, 127349, Russia
Citizenship: RUSSIA	

Full name of third joint inventor:	Alexey D. Semenov
Inventor's Signature:	Date:
Residence:	Moscow, Russia
Post Office Address:	11 Lukinskaya Street, Apt. 616 Moscow, 119634, Russia
Citizenship: RUSSIA	

Full name of fourth joint inventor:	Oleg V. Okunev
Inventor's Signature:	Date:
Residence:	Moscow, Russia
Post Office Address:	4 Ak. Vinogradova Street, Apt. 172 Moscow, 113143, Russia
Citizenship: RUSSIA	

Full name of fifth joint inventor:	Kenneth R. Wilsher
Inventor's Signature:	Date:
Residence:	Palo Alto, California
Post Office Address:	1085 Emerson St Palo Alto, CA 94301
Citizenship: USA	

Full name of sixth joint inventor:	Steven A. Kasapi
Inventor's Signature:	Date:
Residence:	San Francisco, California
Post Office Address:	584 Castro Street San Francisco, CA 94114
Citizenship: CANADA	

RECORDATION FORM COVER SHEET  
PATENTS ONLY

U. S. PATENT AND TRADEMARK OFFICE  
Patent and Trademark Office

To the Honorable Director of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying parties

- (a) Roman Sobolewski
- (b) Gregory N. Goltsman
- (c) Alexey D. Semenov
- (d) Oleg V. Okunev
- (e) Kenneth R. Wilsher
- (f) Steven A. Kasapi

2. Name and address of receiving party

Name Schlumberger Technologies, Inc.

Street Address 150 Baytech Drive

City San Jose State CA Zip 95134

Country USA

10542 U.S. PRO  
09/628116  
09/28/00

Additional names of conveying party attached?

Yes  No

3. Nature of Conveyance:

- Assignment  Merger
- Security Agreement  Change of Name
- Other \_\_\_\_\_

Name and address of receiving party(ies):

Name: University of Rochester

Street Address: 518 Hylan Building

City: Rochester State: NY Zip: 14627

Country: USA

4. Application number(s) or patent number(s)

If this document is being filed together with a new application, the execution date of the application is: July 26, 2000

A. Patent Application No.(s) -

Title: Superconducting Single Photon Detector

B. Patent No.(s)

Additional numbers attached?  Yes  No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name Patrick D. Benedicto

Internal Address: SKJERVEN, MORRILL, MacPHERSON LLP

Street Address: 25 METRO DRIVE, SUITE 720

City SAN JOSE State CA ZIP 95110

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41): ..... \$40.00

Authorized to be charged to Deposit Account 19-2386

Charge Deposit Account 19-2386 for any additional fees required for this conveyance and credit deposit account 19-2386 any amounts overpaid

DO NOT USE THIS SPACE

8. Statement and signature.

*To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.*

Patrick D. Benedicto 40,909  
Name of Person Signing

Signature

Date

Total number of pages comprising cover sheet 3

## ASSIGNMENT

For good and valuable consideration, receipt of which is hereby acknowledged we,

Roman Sobolewski	Of Pittsford, New York
Grigory N. Gol'tsman	Of Moscow, Russia
Alexey D. Semenov	Of Moscow, Russia
Oleg V. Okunev	Of Moscow, Russia

hereby sell, assign and transfer to University of Rochester, a non-profit educational institution, having a place of business at 518 Hylan Building, Rochester, NY 14627, its successors and assigns, the entire right, title and interest throughout the world in our invention in:

### Superconducting Single Photon Detector

for which we have executed a United States patent application on or about the date of this assignment, and all patent applications and patents of every country for said invention, including divisions, reissues, continuations and extensions thereof, and all rights of priority resulting from the filing of said applications; we authorize the above-named assignee to apply for patents of foreign countries for said invention, and to claim all rights of priority without further authorization from us; we agree to execute all papers useful in connection with said United States and foreign applications, and generally to do everything possible to aid said assignee, their successors, assigns and nominees, at their request and expense, in obtaining and enforcing patents for said invention in all countries; and we request the Commissioner of Patents and Trademarks to issue all patents granted for said invention to the above-named assignee, its successors and assigns.

Executed this \_\_\_\_\_ day of \_\_\_\_\_, 2000.

\_\_\_\_\_  
Roman Sobolewski

State of \_\_\_\_\_ )  
                  ) ss.  
County of \_\_\_\_\_ )

On \_\_\_\_\_ before me, \_\_\_\_\_ personally  
personally appeared \_\_\_\_\_ personally  
known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose  
name(s) is(are) subscribed to the within instrument and acknowledged to me that he/she/they  
executed the same in his/her/their authorized capacity(ies), and that by his/her/their  
signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s)  
acted, executed the instrument.

WITNESS my hand and official seal.

\_\_\_\_\_  
SIGNATURE OF NOTARY

Executed this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_.

\_\_\_\_\_  
Grigory N. Gol'tsman

WITNESSED:

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Type or print name of witness

Executed this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_.

\_\_\_\_\_  
Alexey D. Semenov

WITNESSED:

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Type or print name of witness

Executed this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_.

\_\_\_\_\_  
Oleg V. Okuney

WITNESSED:

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Type or print name of witness